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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,337	09/14/2000	Kim B. Roberts	9-13528-135US KD/bm	2336
20988	7590	04/23/2004	EXAMINER	
OGILVY RENAULT 1981 MCGILL COLLEGE AVENUE SUITE 1600 MONTREAL, QC H3A2Y3 CANADA			COLLINS, SCOTT M	
			ART UNIT	PAPER NUMBER
			2143	
DATE MAILED: 04/23/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/662,337

Applicant(s)

ROBERTS, KIM B.

Examiner

Scott M. Collins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-82 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-82 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Claims 1-82 examined
2. It is hereby acknowledged that the following papers have been received and placed of record in the file: Information Disclosure Statement on 09/14/2000.

Claim Objections

3. Claims 27-29 are objected to because of the following informalities: the claims refer to a "second predetermined value" with no mention of a "first predetermined value". The examiner sees the possibility that claim 27 was to depend from claim 23, which references a "first predetermined value". Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bencheck et al., U.S. Patent Number 6,072,777 (herein referred to as Bencheck) in view of Opoczynski, U.S. Patent Number 5,655,068 (herein referred to as Opoczynski).
6. Referring to claim 1, Bencheck has taught a method of validating a connection mapped through a communications network between first and second end-nodes (Bencheck column 6, lines 3-23), the method comprising the steps of:

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- a. at the first end-node, inserting performance monitor (PM) information into a predetermined location within a payload portion of a payload envelope (Bencheck figure 2 and column 6, line 42 – column 7, line 30 where overhead information is inserted.);
 - b. transporting the payload envelope through the connection to the second end-node (Bencheck figure 2 and column 6, line 42 – column 7, line 30); and
 - c. at the second end-node, extracting the PM information from the predetermined location within the payload envelope (Bencheck figure 2 and column 6, line 42 – column 7, line 30 where overhead information is extracted.).
7. Bencheck has disclosed inserting and extracting overhead information into the payload envelope in a performance monitoring system. However, Bencheck does not expressly disclose that the overhead information contains error and/or error correction information, but only that it can aid in determining a root cause for an error. Opoczynski details a system that inserts error codes into data messages along the downstream and upstream data paths that aid in monitoring the system's performance (Opoczynski abstract). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to expressly utilize the inserted and extracted overhead information for explicit error information as in Opoczynski's system. One of ordinary skill in the art would have been motivated to do this because the overhead information was already being inserted and extracted for performance monitoring in Bencheck's system and it would have been faster and more efficient to also store explicit error information with this information rather than store it elsewhere or recalculate it later.
8. Referring to claims 2-6 and 19, Bencheck has taught a method wherein the payload envelope is an augmented synchronous payload envelope (SPE) or a converted SONET/SDH

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SPE having a payload capacity sufficient to accommodate the PM information and enabling the nodes to pointer process the SPE (Bencheck column 2, lines 12-21; column 4, lines 30-45; column 6, lines 3-23; and column 6, line 42 – column 7, line 30).

9. Referring to claims 7 and 8, Bencheck has taught a method wherein each node in the network is adapted to support a plurality of connection layers and the connection is mapped on one of the plurality of connection layers and wherein PM information respecting each layer is inserted into a respective predetermined location of the payload envelope (Bencheck figure 1; column 4, lines 30-45; and column 5, lines 6-18).

10. Referring to claims 9-17, Bencheck has taught a method wherein the step of inserting PM information comprises a step of inserting one or more of a Trace field; a Parity field; an indicator field; and all the necessary space for the fields and the calculated messages themselves (Bencheck column 12, lines 15-31).

11. Referring to claim 18, Bencheck has taught a method wherein the step of extracting the PM information comprises a step of extracting one or more of a trace field; a parity field; and an indicator field (Bencheck column 12, lines 15-31).

12. Referring to claims 20-22, Bencheck has taught a method wherein the step of extracting a parity field further comprises calculating a parity value, comparing the recalculated parity value with the extracted parity value to obtain an error count, and accumulating the error count value for the received data signal (Bencheck column 12, lines 15-31).

13. Referring to claims 23-29, Bencheck has taught a method wherein the step of extracting an indicator field further comprises the steps of monitoring the indicator field for a

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predetermined value in a number of successive data signals (Bencheck figure 2; column 6, line 42 – column 7, line 30; and column 12, lines 15-31).

14. Claims 30-55 do not recite limitations above the claimed invention set forth in claims 1-29 and are therefore rejected for the same reasons set forth in the rejection of claims 1-29 above.

15. Claims 56-70 do not recite limitations above the claimed invention set forth in claims 30-44 and are therefore rejected for the same reasons set forth in the rejection of claims 30-44 above.

16. Claims 71-82 do not recite limitations above the claimed invention set forth in claims 30, and 45-55 and are therefore rejected for the same reasons set forth in the rejection of claims 30, and 45-55 above where receiving is simply the reverse transaction of transmitting.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


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|----|--------------------|------------------------------|
| a. | Brownmiller et al. | U.S. Patent Number 5,704,036 |
| b. | Rehkopf | U.S. Patent Number 6,505,249 |
| c. | Gessel et al. | U.S. Patent Number 5,732,213 |

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott M. Collins whose telephone number is 703.305.7865. The examiner can normally be reached on Mon.-Thurs. 7:30 am - 5:30 pm.

19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on 703.308.5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

smc
April 16, 2004


DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100